APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,423	06/02/2006	Ros kiri Ing	35202-002US1	3778

69713   7590   03/04/2009
OCCHIUTI ROHLICEK & TSAO, LLP
10 FAWCETT STREET
CAMBRIDGE, MA 02138

EXAMINER
LEWIS, DAVID LEE

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
03/04/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

INFO@ORTPATENT.COM

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/581,423	ING, ROS KIRI
	Examiner	Art Unit	
	DAVID L. LEWIS	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>02 June 2006</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-20</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>02 June 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>10/25/2006</u>.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1.   Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Baker et al. (6903728) in view of Pugliese (2004/0203604).

As in claim 1, Baker et al. teaches of a man-machine interface method, **figure
2 item 122, column 2 lines 5-33**, comprising:

generating physical interactions with active zones belonging to an interface
object, said active zones being associated with predetermined items of
information, **figure 2 item K1-K4**;

detecting the active zones at which said interactions occur by measuring at least
one physical magnitude, **column 1 lines 20-26, figure 1 item K1-K4**; wherein a
key selection represents measuring the physical magnitude of the button/switch
being pushed and therefore selected. an intentional key entry is made if a key
was pressed for a first certain amount of time and released for a second certain
amount of time.

and associating each detected interaction with the predetermined item of information corresponding to the active zone where said interaction has been detected, **column 4 lines 39-52**;

the method wherein the active zones are defined for a predetermined finite length of time and then deactivated at the end of said predetermined length of time, **column 6 lines 7-27, column 7 lines 52-61, column 8 lines 1-20**; wherein the active zones are redefined for each state transition as shown in the operation mode and state transitions.

and when interactions with said interface object are detected while said active zones are deactivated, said active zones are redefined automatically and successively, **column 6 lines 7-27, column 7 lines 52-61, column 8 lines 1-20**

However Baker et al. fails to explicitly teach of said active zone redefinition as a function of the first successively-detected interactions.

Pugliese teaches of said active zone redefinition as a function of the first successively-detected interactions, **paragraphs 22-26**.   In Pugliese the keys are defined as active or locked, and may be unlocked by a specific key sequence that the cpu recognizes as a system state change sufficient to redefine at least a portion of the keys.   Pugliese provides a state change based on a known successively detected interaction, said key sequence, which provides a well known key lock function. Pugliese teaches of an obvious key sequence known in the art and available for use in the invention of Baker et al. as a method to change the state of the phone system, and accordingly redefine said active zones.

Therefore it would have been obvious to the skilled artisan at the time of the invention to provide a key lock function activated by a successively detected key

sequence at taught by Pugliese in the phone system as taught by Baker et al., because Baker suggests using known phone features that would produce a state change and redefining of active zones as a consequence of said state change, as found in claim 1.

As in claim 2, Baker et al. in view of Pugliese teaches of, wherein an interactions are detected with the interface object while said active zones are deactivated, said active zones are automatically redefined only if a predetermined initial sequence of successive interactions is detected, **Pulgiese, paragraphs 22-26**.

As in claim 3, Baker et al. in view of Pugliese teaches of, in which said predetermined initial sequence of interactions comprises two successive interactions at a single location on the interface object, within a time interval shorter than a predetermined duration, **Pulgiese, paragraphs 22-26**. wherein a sequence code can obviously have a character represented twice in succession as a design choice.

As in claim 4, Baker et al. in view of Pugliese teaches of, in which the location of said two successive interactions determines a first active zone, **Pulgiese, paragraphs 22-26**. wherein part or all of the active zones are unlocked.

As in claim 5, Baker et al. in view of Pugliese teaches of, in which, during a stage of redefining active zones subsequent to said initial sequence, a predetermined number K of active zones are defined in succession at the locations of the K first interactions to be detected after said initial predetermined sequence of interactions, **Pulgiese, paragraphs 22-26**. wherein part or all of the active zones are unlocked, and therefore refined as taught by Baker in view of Pugliese.

As in claim 6, Baker et al. in view of Pugliese teaches of, in which the stage of redefining the active zones is interrupted if no following interaction is detected during a predetermined timeout after a detected interaction, **Pulgiese, paragraphs 22-26.** wherein unintended key touch based on lapse of time or standby mode based on lapse of time is performed as known in the art.

As in claim 7, Baker et al. in view of Pugliese teaches of, in which during the stage of redefining active zones, an interaction is detected in an active zone when the measured physical magnitude is subject to a variation that is greater than a first predetermined limit, and after said stage of redefining active zones, an interaction is detected in an active zone when the measured physical magnitude is subject to a variation greater than a second predetermined limit that is itself less than the first limit, **Pulgiese, paragraphs 22-26.** wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made.

As in claim 8, Baker et al. in view of Pugliese teaches of, in which during the stage of redefining active zones, an interaction is detected in an active zone when the measured physical magnitude is subject to a variation for a duration that is longer than a first predetermined limit duration, and after said stage of redefining active zones, an interaction is detected in an active zone when the measured physical magnitude is subject to a variation for a duration that is longer than a second predetermined limit duration, itself shorter than the first limit duration, **Pulgiese, paragraphs 22-26.** wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of

key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made.

As in claim 9, Baker et al. in view of Pugliese teaches of, in which when interactions with the interface object are detected while the active zones are deactivated, the P first detected interactions are recorded during a recording stage, where P is a predetermined non-zero integer, and Z active zones are automatically redefined as a function of said first P detected interactions, where Z is a non-zero integer less than P, corresponding to interactions detected in different zones, and then the predetermined items of information corresponding to the P first detected interactions are determined, **Pulgiese, paragraphs 22-26**. wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made..

As in claim 10, Baker et al. in view of Pugliese teaches of, in which the recording stage is interrupted if one of the P first interactions is not followed by a following interaction within a time period shorter than a predetermined timeout duration, **Pulgiese, paragraphs 22-26**. wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made..

As in claim 11, Baker et al. in view of Pugliese teaches of, wherein the interactions with the interface object are detected while the active zones are deactivated, the P first detected interactions are recorded during a recording stage, where P is a non-zero integer, said recording stage terminating when the

interaction P is substantially identical to the first interaction of the recording stage, and P-1 active zones are automatically redefined as a function of said P first detected interactions corresponding to interactions detected in different zones, and then the predetermined items of information corresponding to the P-1 redefined active zones are determined, with said items of information depending on the number P-1, **Pulgiese, paragraphs 22-26**. wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made..

As in claim 12, Baker et al. in view of Pugliese teaches of, in which the set of active zones is subdivided into a plurality of groups of active zones, and when interactions with the interface object are detected in an active zone belonging to a group of deactivated active zones, said active zones of said group of active zones are redefined automatically and successively in a manner that is independent from the other groups of active zones, **Pulgiese, paragraphs 22-26**. wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made..

As in claim 13, Baker et al. in view of Pugliese teaches of, when interactions are detected with the interface object while said active zones are deactivated, said active zones are redefined automatically and successively as a function of the first interactions to be successively detected, and the detected interactions are associated substantially simultaneously with the predetermined items of information, **Pulgiese, paragraphs 22-26**. wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and

intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made..

As in claim 14, Baker et al. in view of Pugliese teaches of, in which the measured physical magnitude is selected from a soundwave, a mechanical strain, a quantity of back-scattered light, and an electric field, **Pulgiese, paragraphs 22-26**. wherein said feature would have been an obvious design choice in view of known input touch display systems that serve as input for registering successive interactions.

As in claim 15, Baker et al. in view of Pugliese teaches of a man-machine interface device specially adapted to implement a method according to claim 1, Baker et al., figure 2 item 122, Pugliese, figure 1 item 1.

As in claim 16, Baker et al. in view of Pugliese teaches of, in which, during a stage of redefining active zones subsequent to said initial sequence, a predetermined number K of active zones are defined in succession at the locations of the K first interactions to be detected after said initial predetermined sequence of interactions, **Pulgiese, paragraphs 22-26**. wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made..

As in claim 17, Baker et al. in view of Pugliese teaches of, in which, during a stage of redefining active zones subsequent to said initial sequence, a predetermined number K of active zones are defined in succession at the locations of the K first interactions to be detected after said initial predetermined

sequence of interactions, **Pulgiese, paragraphs 22-26**. wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made..

As in claim 18, Baker et al. in view of Pugliese teaches of, in which the stage of redefining the active zones is interrupted if no following interaction is detected during a predetermined timeout after a detected interaction, **Pulgiese, paragraphs 22-26**. wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made..

As in claim 19, Baker et al. in view of Pugliese teaches of, in which the stage of redefining the active zones is interrupted if no following interaction is detected during a predetermined timeout after a detected interaction, **Pulgiese, paragraphs 22-26**. wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made..

As in claim 20, Baker et al. in view of Pugliese teaches of, in which during the stage of redefining active zones, an interaction is detected in an active zone when the measured physical magnitude is subject to a variation that is greater than a first predetermined limit, and after said stage of redefining active zones, an interaction is detected in an active zone when the measured physical

magnitude is subject to a variation greater than a second predetermined limit that is itself less than the first limit, **Pulgiese, paragraphs 22-26**. wherein a subset of unlocked keys and locked keys are distinguished by senseless or wrong key entry and intentional key entries, with intentional key entries being determined by entering a number of key entries with a certain maximum time limit, in combination with keys locking after a certain interval of time during which no entry is made.

Conclusion

2.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

3.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David L. Lewis** whose telephone number is **(571) 272-7673**. The examiner can normally be reached on MT and THF from 8 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached on **(571) 272-7681**. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571)-273-8300.

4.   Information regarding the status of an application may be obtained from the
        Patent Application Information Retrieval (PAIR) system. Status information for
        published applications may be obtained from either Private PAIR or Public PAIR.
        Status information for unpublished applications is available through Private PAIR
        only.   For more information about the PAIR system, see http://pair-
        direct.uspto.gov. Should you have questions on access to the Private PAIR
        system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-
        free).

Examiner: David L. Lewis

March 1, 2009

/David L Lewis/

Examiner, Art Unit 2629